Giro Andar, Zankhan and Rashidan, were most affected from this issue. At the start of current year, a large number of trees and vineyards were negatively affected by frosts. A shortage of drinking water is one of the major problems in most of the central parts and districts especially in Jaghory, Malestan, Jaghato, Wahez, Geero, Ander, Zanakhan, and Rashedan are more vulnerable to the situation. There are shortages of food commodities in far away districts and villages.

The main proposals for this province are as follows:

- Construction of reservoir dam in Khwajagan up stream from the Sultan dam as a suitable resource in respect of feeding ground water is to be recommended.
- Provision of potable water in all districts in their villages according to the relative populations, considering the option of establishing water supply networks.
- Cleaning of karizes springs and operational and semi-operational canals that are out of economic operation.
- To seek licit markets for agriculture production such as almond, raisin, potato and curd that in general are being bought at heavily discounted prices because they are being smuggled abroad.
- Construction of reservoir dam by utilizing of seasonal rain in local, area such as Malistan, Nawar, Tangi-andar, Zormatan in additionally in Jalga river which has good potential to build such dams.
- During the winter season, the extra water flows from the Sultan dams without being utlized. If a canal were to be excavated by using of the route of Joe Kamal from Khwaja Omar, up to reservoir dam of Sarde, this water could enter to the dam and increase the reserves of the Sarde Dam as an extra resource.
- Reconstruction and improvement of roads, establishment of schools, clinics and agriculture cooperatives would be solve the many problems of the people.

Zabul Province

Shortage of drinking and irrigation water in various localities of this province from the lack of rain and snow. As a consequence many of the springs and karizes became completely dry.

The main proposals for this province are as follows:

- Provision of drinking water is extremely urgently needed.
- Construction of reservoir dams over Mizan River, Larmagha River, Lewcongi, Toshangi and Khak Afghan to strengthening water resources for karizes and springs are needed.
- Constructions of schools, health clinics, improvement of roads are the basic requirement of each region of this province.
- To improve plant protection.
- Disarmament of local elites and militia and the deployment of the national Afghan army to the region to provide security and ensure that stolen public land is returned appropriately.
- Establishment of poultry and animal husbandry enterprises to create more job opportunities.
- To supplement technical and vocational personnel for functioning of Government service affairs, are needed.
- To find alternative income-generation for prevention of poppy cultivation.

Urozgan Province

Agriculture production including rain fed cultivation has decreased.

The main proposals for this province are as follows:

- Provision of drinking water all over the province is a priority, particularly in Garmab, Kharmab villages, Kashinkhile in centre and district of Khas Urozgan.
- Provision of plant protection services.
- To carry out general survey of reservoir dams direction to strengthen the water flow to karizes and springs, especially in area of Ghulam over the Tere River in Tangi Agnajan and in Surkh Murghab in Tangi, Kajawal.
- Strengthening of the bank of Helmand River in the point of Ghulam, Hesar and Paitoto.
- Supplementing of technical and professional staff, particularly in Urozagn hospital.
- Construction of schools and improvements to roads and establishment of clinics in districts.
- Provision employment opportunity for youth because joblessness affected youth tend to become involved in addiction to cannabis, opium and heroin.
- Dispatching an electrician or professional person to install electric generation in centre of the province.

Ghor Province

Ghor is set back in the terms of development stages. Thus imagine that in this province, there are few people that have worked in many of these fields needed for the promotion of development and reconstruction.

The main proposals for this province are as follows:

- Provision of potable water in districts and villages.
- Increasing food and commodity prices is a critical problem in this province. Thus, people in Shahrak district had started to eat grass and a large number of these people transferred to Herat and Helmand IDP camps.
- Improvement of roads is an emergency necessity of the province. The lack of good roads ensures that many people die travelling to the nearest health facility. The poor access to health facilities is believed to have contributed to the large number of people affected by tuberculosis.
- Address the lack of technical personnel and agriculture tools in agriculture department.
- Prevision of water for agriculture cultivation in this entire province is required. Shallow and deep wells haven't been dug in this province.
- Construction of reservoir dam over the Hari road located in centre of the province and Comanche area.
- Supplementing technical and provincial personnel in Ghor province.

Kandahar Province

In this province the condition of Arghndab and Shawallkot district that are benefited from Dehla dam were assessed as satisfactory. But other districts of this province were situated in badly drought affected areas.

The main proposals for this province are as follows:

- The ground water tables have decreased as a consequence of lack of rain and snow within last 6 to 18 months. The water pumps installed over Arghandab canal without permission of

relevant authorities in contradiction of the water right of those people near the canal has seriously prevented the use of the water.

- To introduce alternative crops to replace the poppy.
- In Dori Rod, Takhta Pol, KadniRod, Zhormnda and Spin Boldak, the people applied to dig the wells to discover the ground water resources without observing the technical standards for exploitation of under ground water resources. They used this water both for drinking and irrigation purposes. It is recommended that above mentioned wells must be assessed according to the technical best practice to avoid negative consequences.
- Creation of employment opportunities.
- In the current situation establishment of motorised systems will require extra ordinary funding and will also be difficult to maintain them in good order, so the repairing of hand pump and further deepening of existing wells based on actual needs is the recommended course of action.
- Agriculture and irrigation only in the districts of Shawallkot and Arghandab benefited from Dehla Dam and were in better state than the rest of the districts such as Dand, Damman, Maiwand Panj Whee, Spin Boldak, Arghastan and Zheri.
- Construction of schools, improvement of roads, clinics and hospitals and agriculture cooperatives are accounted as a necessity of the province.

Farah Province

Frequent droughts have been experienced, particularly in recent years. Most of the people of this province are confronting the shortage of potable and agriculture water, that in the current year has become more serious and unprecedented. The surface and under ground water resources caused reduction of snow and rain and digging deep wells in an inappropriate manner has in recent years decreased availability of potable water. Seasonal desert sand storms have lashed the districts of Lash Jawin Shiko and Khake Safid, TheSE agriculture lands were affected resulting IN around 90 percent of agriculture production being negatively affected. It also produced health challenges including eye redness, respiratory illness, tuberculosis and diarr his hoea.

The main proposals for this province are as follows:

- Construction of a water supply network system that is more effective in removing the difficulties concerning the potable water.
- Construction of reservoir dam over the Farah road in Bakhshahbad area is proposed by the provincial authority.
- Provision of employment opportunities for youth labour is one of the requirements of this province, because around 50 percent of youth are unemployed and this increases the likelihood of becoming addicted to drugs.
- Assistance of essential commodities through food for work is vitally needed, particularly in lash Jawin Shiko and Khak Safid Districts.
- Construction of schools, improvement of communication roads, clinics and agriculture cooperatives constitute the main requirement of the people.

Helmand Province

The Helmand River passes through many districts of this province. Although the water level is affected by drought, cultivation is not so bad in this province. The drop in ground water level is caused especially in the three upper districts where the main potable water problems are encountered.

The main proposals for this province are as follows:

- Supply of potable water within the three districts Bughni, Baghram, and Nawzad is a priority, because the water table level in these districts is dropped by bellow 50 to 70m and 90% of the population has already emigrated to the nearby areas.
- Construction of new dams along the Helmand River in the Garmat villages is recommended.
- Digging of new canals in the districts of Kajaki, Musa Qala, Sangine are recommended. Digging of canals upper than the Bughra Dam helps to prevent land degradation in the region.
- Resettlement of 1500 refugee families from the neighbouring provinces, in the last two years, has caused joblessness in the region, but the refugees say that the presence of Pakistani workers is the main cause of joblessness and lawlessness in the region.
- The main desire of the Helmand people is to reconstruct the 100 km road between Kandahar and Helmand.
- Treatment of the plant diseases like measles, pachak, and shakarak is urgent.
- Completing the technical personnel in the medical sector will help, solve the people's problems health problems.
- Reform and rehabilitation of schools, clinics and roads in all districts.

Nimroz Province

The Khashrud River which watered the Chakhansoor and Khashrud districts before the drought has dried up now. Similarly the Helmand River watering the KANK, CHARBUJAK and central Zarange has not enough water. Floods in rainy season damage the crops severely.

The main proposals for this province are as follows:

- Lack of potable water in Chakhansoor, Kank and Khashrud districts. People say water to 8 meters depth tastes sour, after 8m it is bitter and only after 200 meters does it become drinkable. From the technical point of view, supply of water from Lashkary Canal of Helmand River by a net work of water pumps, would be more economical than to supply it from ground water by hand pumps.
- Construction of Kamal Khan Dam, over Helmand River, construction of Shela Charkh water storage dam, and strengthening of the Helmand river banks up to Showrai village approximately 45km distance, may solve the problem of water deficit.
- Review of the water supply system in Zarange, changing of pipes from 4 to 10 inches in diameter, and supply of water through water tanks in areas where water taste sour, may solve the problem of population increase in the city.
- More over, potable water and irrigation water may be supplied through Lashkary Canal of 47km length e.g. 20.7 m^3/sec current for the region.
- Four canals with separation distance of 5km between each have been dug by Iran. They have also made controlling gates along the canal, which are open during normal current, and closed in the flood time. These results in water overflow and the destruction of thousands of hectares of land in Kank districts and Zarange central city. Also they have installed a number of powerful water pumps in the areas between Kohak and Alibur at a distance of 50-60km. It is worthwhile to mention that according to, the signed protocols and the right of water; one can not use multiple points at the same area for water usage. This is a serious question to be undertaken.

- Provision of technical and vocational personnel in the health sector, within the centre of the province and in districts.
- Rehabilitation of schools, construction of clinic and improvement of roads are the demand of people.
- Launching of poultry and animal husbandry projects through agricultural cooperatives is one of the ways suggested to create job opportunities.

Heart Province

- The agricultural and irrigation conditions in Heart province has suffered from the existing drought. Nevertheless it is not so bad, comparing with other neighbouring regions in the south-eastern zone. Some portion of the province suffered from deficit of water for drinking and plantation purposes. The level of needs for potable water in the central city and in the districts is of a similar degree. This is because of the similar degree of drop in the water table.

The main proposals for this province are as follows:

- Treatment of plants and agricultural disease seems to be urgent and necessary.
- To supply irrigation water, construction of Salma Dam over Harirud River is vital. Construction of water storage dam at Kafghn which collects flood water may help replenish the springs and karizes in the region.
- Providing potable water through gravity system is appropriate. So it seems necessary to cleanup the springs and karizes in the area.
- Establishment of agricultural cooperatives and provision of agricultural tools within the districts is a necessary undertaking.
- Distribution of foodstuff against physical work in kariz cleaning and road improving program may provide work opportunity for jobless people.
- Rehabilitation of poultry and animal husbandry farms and encouragement of national capitalists in the region may be a useful.
- Completion of technical and vocational, cadres in districts and in the central city is an urgent need.

Annex 2 Provinces districts and villages assessed

Reason for non-assessment	Non-assessed districts	Villages assessed	Districts assessed	Name of Province
Poor security & communications	Sabarae	Shinkay Village	Klandar	Khost
		Swari, Pana Kalay Abad Khana	Yaqoubi	
		Nazi Khel	Guraz	
		Saman Khel	Bak	
		Laghori Pirano	Tani	
		Lngni Badikhel, Star Babor Sad Khel	Center Of Province	
		Hasan Muhamad Kalay, Barkhankhel Bahram Khel	Mandozai, Ismail Khel	
		Aka Kalay, De Dani Ster Kalay	Jaji Maidan	
		Sorawi Kalay	Shmal Dwa Mandi	
		Star Quaom Haroon Khel	Ali Sher	
		Kapri Kalay	Nadir Shah Koot	
		Khair Khel	Markaz Matoon	
		Margha Kalay, Quarya Waya	Musa Khel	
		Dara Hashim Khel Show Khel Rukyan, Mirkhel, Shag, Zardkhel, Khair Mina, Dara Omar Khel, Ali Khel, Khuzan, Lasnagi, Gughondya, Khel Balawat, Mahar Gul	Jaji Aryob1 Jaji Aryob2	Paktia
		Tori Khel, Fajari, Sori Khel	Garda Hairi	
		15 Villages, Example Mast Khel, Afzal Khel Mahland, Zahoo Hajian, Sarokhel And Etc	Center Of Province Gardez	
		Machal Ghoo, Ghrak, Ahmad Abad, Shali Khel, Alikhel, Kemalkhel	Ahmad Aba	
		Mirzaka Mangal, Aybi, Khojor, Karkin Khola	Sayed Karam	
		Babokhel, Alishahkhel	Chamkni	
		Matorakh, Makil, Qimati Mangal, Danda	Danda Patan	
		Dara Shabakkhel, Dara Abrahimkhel	Shawak	
		Pawarkhel, Kotagi, Rodgoor	Jani Khel	
		Darahasankhel, Sakandarkhel, Dara Ahmadkhel, Mamakhel, Alikahel	Ahmad Khel Jaji	
		Khankhel, Kowandarkhel,Chito, Fatokhel	Sayed Karam	
		Naik Nam Markabkhel, Saleh Khel, Shahi Koot, Rama	Zurmat	
		Baqoom, Darikhel, Motikhel	Wazi Zadran	
		Mish, Yosaf Khel Center, Baratkhel, Jarkana, Kharbin, Shahmok Khel, Landizai, Sulaimanzai, Mosh Khel, Isa Khel	Yousaf Khel	Paktika
		Magil Khel, Mati Khel, Dina Khel, Jalal Khel, Ghaibi Khel, Shahmalzai, Zarangi, Gulwal, Markaz Isa Khel	Yahya Khel	
		Sadat Wal, Khadla, Spina	Romana	
		Malizai, Kharlandi, Ghti Kalay	Khair Koot	
		Shikhal, Jalalzai, Jani Khel Center	Jani Khel	
		Chorimyagul, Alibnazar, Logla, Kuhna Mamor	Khushamand	
		Qaom Khozai, Qaom Manhi Qaom Ali Zai, Jalal Khel, Nazam Khel, Laili Zai	Dila	
		Wazakhawa Center, Gowashta, Patni, Buta Khel, Maryani, Ali Zai, Dina	Wazakhawa	

Reason for non-assessment	Non-assessed districts	Villages assessed	Districts assessed	Name of Province
		Khel		
		Gulalai, Sinzala, Manzeli, Spita	Warmami	
		Tor Wam, Ala Nazar, Haji Sadozai, Najaf, Tarkha	Sarwari	
		Zaoli, Amir Khel, Muhamad Khel, Sawants Sila	Sharan	Paktika
		Gayan Khel, Ali Khel, Melat Kalan, Noram	Urgon	
		Tamir, Zanki, Pitoh, Mashkin, Manhi	Gomal	
		Rakha, Rabat, Bandari, Tora Wari, Margha, Lawara	Barmal	
		Awzhana, Sarmaidan, Mana Kalay, Margi, Safari, Shirmi, Sultan Khel, Parwiz Khel	Zirok	
		Gul Koot, Mini, Mobin Kalay, Kamal, Anhar, Khan Muhamad, Markaz Gayan, Multani, Wach Kalay, Guli	Gayan	
		Sadaq, Bazak, Norki, Fatah Khan, Barimi, Nor Khel	Nika	
		Pas Ni, Babo Khel, Abas Khel, Tawos Khel	Surobi	
		Sultani, Marzak, Tap Dobi, Kajaki, Shandawar Khel	Sarhaoza	
		Choni, Abrahim, Kota Khel	Quia Khan	
		Yaman Khel	Ajrstan	Ghazni
		Agar, Gandab, Saiadan	Jaghtoo	
		Saiadan	Khogiani	
		Jangalak, Sokhta Jangal	Nawar	
		Jelaw Khel	Jaghor	
		Da Meter, Zardaloo	Qarabagh	
		Shabnam Krak	Maqr	
		Surkh Deh	Rashidan	
		Desi	Giro	
		Khushrodel	Zankhan	
		Barakaat	Khwaja Asri	
		Rubaat	Da Yak	
		Haft Asiab	Waghaz	
		Lashmak	Center Of Ghazni	
		Muhamad Dan Khel	Andar	
		Koshnang	Malastan	
		Ab Garam, Surkh Murghab, Sad Murda, Karizes, Kashankhik, Khurma	Trin Koot(Center)	Urozgan
		Deh Huzar, Gharam, Center Of Dehra Wood, Mazar,Toto, Ala Takh	Dehra Wood	
		Shah Mashad, Sakhar, Oushi, Boto, Gharma, Gorgin	Char China	
		23 Villages, Keshi, Sarab, Qodi, Sia Sang, Surkhab, Wala Etc	Nawa Khoni	
		8 Villages, Regak, Center Of Yakhdan, Sakhi, Etc	Yakhdan	
		13 Villages, Shash Burja Shali Nawa, Garamaab, Matakzai, Shashpar, Wardak Nawa Etc	Khas Urozgan	
		13 Villages, Chla We, Ragh, Chinarto, Qala, Ghara, Niazo Ect	Chor	
		12 Villages, Deh Hor Murghan, Pito Daadak, Saalariz, Shah Mudat, Etc	Chaghcheran	Ghor
		Sia Chob , Qarghat, Dewar Safid	Dolina	
		Pirkushta, Sang Mina Aab, Suri	Teuara	

Reason for non-assessment	Non-assessed districts	Villages assessed	Districts assessed	Name of Province
		Paayaan, Qarchi, Doulat Yar, Etc		
		Tagaab, Deh Murda, Shinia	Shahrak	
		Sangaan, Ghor, Surkh Dewar, Bamom, Saroudgul, Aabparaan	Pasawand	
		Sig Shaanda, Nawe Gala, Delak	Lal Wa Sar Jangal	
		Khafk, Khina, Qalaguohar, Safidhak	Charsada	
		, Jarf, Manakai Ulya, Manakai Sulfli	Saghar	
		Khamin, Sang Khalq, Khuaja	Tolak	
		Saalariz, Shoraaba, Nig, Shahmurda, Deh Hor, Baraat	Murghab	
Far Away And Security Problems	Shoraba Has Not Seen	Saha Ban Dahla	Shahwali Koot	Kandahar
Security Problems		Sara Kalay, Spin Ziarat	Dand	
		Road Ahmad Zai	Daamaan	
		Jalawa, Khuaja Malek, Saranjan	Arghandaab	
		Hanzari, Qarya Kariz, Salim, Band Timur	Maiwand	
		Bazkazai, Suliman Ulia	Panjoai	
		Bori, And Its Relevant Area	Shahwali Koot	
		Kadni Road, Zormanda	Spin Boldak	
		Kahre Darzi, Yaman Kalay, Nasiri	Takhta Pul	
		Saha House Madad	Zhiri	
Security Problems	Bakwa	Nomha, Tosak	Center	Farah
Security Problems	Gulstan	Nal Dasht	Pasht Road	
		Qala Sadat, Gor Gak	Anar Dara	
		Luqman, Lash Jawin Center	Lash Jawin	
		Suran Safli, Khuram Jam	Parchman	
		Masaw Omomi	Khak Safid	
		Keen Gharb, Muhamad Abad, Bajda	Ship Ko	
		Kunj Abad Garani	Bala Bolak	
		Korghan	Khak Safid	
		Qarya Gast, Qarya Kalata Akhand	Qala Kah (Pasht Ko)	
Problems Of Communication And Security	Waseer	Mukhtar, Khara Bast, North Bolan, South Bolan, Center Of The Urban	Lashkargah	Helmand
Security Problems	Dishoo	150 Villages, Kariz Khushk, Shir Ghaza, Shiran Village, Nidamat Village And Etc	Musa Qala	
		69 Villages, Roshan Abad, Shin Dara, Hasan Dewana, Gulkhana, Chinar	Baghni	
		36 Villages, Qala Gul, Now Abad, Bakhtiari, Khlawik, Kooti	Kajaki	
		16 Villages, Gadain, Miandori, Gank, Khalam Abad, Gulkhana, Gharghara	Sangin	
		40 Villages, Qala Guzar, Alkuzai, Haider Abad, Zambali, Yakhchal	Garashk	
		70 Villages, Qarya Mazar, Khawa, Kalay Sia, Bewash, Shah Muhmood	Now Zad	
		45 Villages, Sarmal, Dara Goroh, Baghdan, Mayagan, Qarabagh	Baghran	
		Khushal, Shin Kalay, Zarghon Kalay, Loi Baba	Nad Ali	
		18 Villages, Ali Khel, Jan Abad, Ali Bawar, Jan Bazaran, Surkhan And Etc	Marje	
		35 Villages, Aynak, Khlij, Khesrow	Nawa	

Reason for non-assessment	Non-assessed districts	Villages assessed	Districts assessed	Name of Province
		Abad, Kngarin, Surkh Doz And Etc		
		Hazar Juft Ulia, Deh Zekria, Darwishan	Garmser Of Hazar Juft	
		27 Villages, Malkhan, Khair Abad, And Etc	Khanshin	Helmand
		Ali Ab, Muhamad Safar Khan, Ghulam Muhai Din Khan, Akbar Khan, Shiran Khan	Chaghansoor	
		Karim Kushta, Zulfeqar, Mir Afzal, Panj, Shir Abad, Hasan Abad, Haji Ghulam Nabi	Gang	
		Karkani, Bandar, Roadin, Karordi	Charbarjak	Nimroz
		Khash Sultan Muhamad Now, Haji Nor Agha, Haji Malang	Khashroad(Gharghari)	
		Deh Murda, Abdurahman Lala, Abdulhamid, Ghulam Rasool, Mirza Muhamad Azim	Zaranj Center	
		Kanyan	Anjil	
		Ziarat Chah	Gazra	
		Sarband Tafhli Village	Pashtoon Zarghon	
		Dahana Ghar Village	Krokh	
		Aftoo Village	Kashk Rabaat Sangi	
		Barna Abad Village	Ghurian	
		Sardar Village	Kohistan	
		Jahak Village	Adarskan	
		Aziz Abad Village	Shendand	Herat
		Salma Village	Chasht Sharif	
		Tagab Mahech Village	Auya	
		Rig Village	Zanda Jan	
		Zanda Chashim Village	Kashk Kuhna	
		Feshwari Safli Village	Gulran	
		According To The Security Concern The Ministry Has Been Carried Out In Central Area Of The District	Farsi	
		Kandalan	Shahre Safa	Zabul
		Korghan	Shah Joy	
Poor security, lacking information on irrigation, agriculture, rural rehabilitation & development. Permission from the Shuras had not been obtained	Seuri, Daya, Poyan, Khak Afghan, Arghandab, Mizan, Shahrezai, Shangi, Now Bahar And Ataghar	Urban Area	Centre Of The Province	

Annex 3 List of participating technical staff

Nimroz	Ghor	Khost	Paktia	Paktika	Helmand	Kandahar	Farah	Ghazni	Zabul	Urozgan	Herat	Relevant Organization
Muhamad Aasaf	Mir Abdul Majed	Muhamad Nasim	Jan Muhamad	Naqibullah	Ghulam Aziz	Muhamad Kabir	Abdul Hamid	Ghulam Hasan	Abdul Sabour	Sayed Gul Muhamad	Ghulam Mustafa	Ministry of Irrigation, Water Resources and Environment
Abdullah	Ab.Qader	Sayed. Saifulrahman	Khalid	Abdul Ahad	Sayed Anwar	Mir Ahmad Shah	Abdul Ghafar	Muhamad Taher	Mir Zabiulllah	Muhamad Hashim	Abdul Habib	Ministry of Industry and Mines
Ghulam Rabani	Abdul Hakim	Mohammad Omar	Samaiullah	Samai	Muhamad Anwar	Muhamad Farooq	Soliman Paiman	Jafar Ali	Muhamad Rasoul	Hafizullah	Amanullah	Ministry Agriculture
Muhamad Amin	Abdullah	Ziauddin	Sharifullah	Muhamad Ayoub	Sayed Matiullah	Abdul Qader	Noorullah	Muhamad Homayon	Shah Mahmood	Jalat Khan	Muhamad Sarwar	Ministry Rural rehabilitation and Development
Provinces of Kandahar, Urozgan, Nimroz, & Zabul				Provinces of Ghor, Herat, Farah, &Helmand				Provinces of Paktika, Paktia, Ghazni, & Khost				Ministry Of Urban Development and Housing
Engineers Abdul Baqi, Zekrullah, M. Alam, Ghuam Sakhi, &Qadim				Engineers M.Akbar, Khwaja Ahmad Seyar, Allah Dad, Qyamudin, Abdul Latif, & Abdul Samad				Engineers Saifurahmand, M.Rasoul Tanwbari, M. Musa , M . Ayob, Alaf Noor & Shah Zai				
		Shir Muhamad	Abdul Wahab					M. Daoud				WFP

Ministry of Irrigation, Water resources and Environment

Emergency Drought Assessment in 12 Vulnerable Southern Provinces

Sour 23 – Jouza 16, 1383
13 May – 15 June 2004

This assessment was completed under the guidance of Ministry of Irrigation, Water resources and Environment with the co-operation of the following ministries and organizations:

- Ministry of Internal affairs
- Ministry of Agriculture and Animal Husbandry
- Ministry of rural rehabilitation and Development
- Ministry of Urban Development and Housing
- Ministry of Mine and Industry
- FAO
- WFP
- FEWS NET[1]

Note: FAO - FEWS NET have been helped in designing of the working plan, Analysis of Data, and preparing the final report.

Table of contents:

Summary

Analysis and assessment of report prepared by government study groups dispatched to vulnerable provinces reveal that the existing drought is a predominant in the areas surveyed. The negative effects are obvious over different aspects of the lives of the inhabitants, especially in the rural areas of the mentioned vulnerable provinces.

Lack of potable and irrigation water, falling under-ground water level, outbreak of pest and plant diseases, reduction in the agricultural and livestock production, vanishing of grazing lands and drying of orchards, erosion of river banks and the deteriorating conditions of roads, lack of health clinics and medical personnel, lack of vocational and administrative personnel in Government organizations, loss of government equipment, lawlessness and poor security are the major problems the confront the people, living in these areas. The following table shows the problems encountered and their recommended solutions.

Table 1. Summary of existing problems in the 12 provinces surveyed and recommended solutions

Problem	Solution	Locations	Responsible Organizations
Lack of Potable Water in villages	Provision of potable water, cleaning of	In the center of provinces, Districts	Ministry of Rural Rehabilitation and

Problem	Solution	Locations	Responsible Organizations
	functioning canals (karizes) and springs.	and villages of the 12 provinces	Development (MRRD)
Out break of pest and plant diseases.	Safe guarding of plants and trees (fruit bearing and un fruit bearing).	In the center of provinces, Districts and villages of the 12 provinces	Ministry of Agriculture and Animal Husbandry
Increasing Joblessness	Providing jobs through the implementation of various projects of public utilities.	All 12 provinces.	MRRD
Propagation of poppy cultivation	Full forbidding of poppy cultivation and propagation of its alternate seeding.	Zabul, Uruzgan, kandahar, Farah, Nimruz, and Heart provinces.	Ministry of Agriculture and Animal Husbandry
Unplanned and unprofessional digging of deep wells	Prevention of unplanned and unprofessional digging of deep wells	Ghazni, Uruzgan, kandahar, Helmand, Farah, Nimrus, and Heart provinces.	Ministries of: Irrigation, Water Resources and Environment and mine and industries.
Providing water for irrigation	Repairing and strengthening of the river banks (paths) and implementation of the urgent irrigation projects	Helmand river path (Zabul-Helmand) Khurum in Paktia and mini projects in all provinces	MRRD
Use of water (without right of water)	Prevention of water pumps installation along the canals	Kandahar, Helmand and Khsot	MIWRE
Lack of food provisions (availbilitly??)	Distribution of food for work programmes .	Distant places in the 12 provinces.	Relevant ministries.
Demolition of transportation routes	Repairing and improving of transportation routes	Transportation routes in provinces, waluswalis and villages.	Ministry of public works.
Absence of potable water	Creating a water supply net work, consisting of springs, canals (karizes) or pump station	Center of provinces and districts	Ministry of Uurban and Housing
Lack of water for cultivation and under ground water replenishment	Survey and construction of water storage dams in Domanda, Marghaz, Bak, Targani, Ahmad Khail Jaji section and Machaghu, Paltoosh, Khwazi, Hahi, Band Gomol, Delwara. Wuch Khawra, Band Khajaghn, Band Balai Dara, Mizan, Daria e Lumagha, Maidangai, Toshanoi, Ghulam Bagh, Tange Aghajan, Tangikhajawal wa Surkh Mnizghuab, Markaz e Checkcheran wa Kamenge, Bakhshe Farah, Band Kamal Khan, Shelh Charkh, Band Hai Kalafghn wa Salma.	Heart, Nimruz, Farah, Ghour, Urozgan, Zabul, Ghazni, Paktia, Khost.	MIWRE Ministry of Water and Power.
Absence of school, health clinics and veterinary services	Rehabilitation of existing schools, construction of new schools, establishment of health	12 provinces	Ministry of education, health, agriculture and animal husbandry

Problem	Solution	Locations	Responsible Organizations
	clinics in Districts and villages. Employment of medical doctors, and vets.		and MRRD
Lack of technical staff.	Completing of Government offices in provinces and in Districts with local competitive staff.	12 provinces	Relevant ministries
Lack of facilities in the Government departments	Provision of vehicles and equipment for the Government departments in provinces and in Districts	12 provinces	Relevant ministries
Absence of Agricultural and farming cooperatives	Supply of improved seeds, provision of chemical fertilizer, giving long term and short term loans to farmers and establishment of farmers unions.	12 provinces	Ministries of agriculture and animal husbandry and MRRD.

Introduction and objectives

According to the guidance of the President of Islamic Transitional State of Afghanistan and the decision dated 14/2/1383 of the cabinet meeting, the ministry of irrigation, water resources and ministries of internal affairs, agriculture and animal husbandry, MRRD, urban development and housing and mine and industries, were ordered to complete and evaluation of the condition of the existing drought in the 12 vulnerable provinces (Zabul, Ghour, Urozgan, Kandahar, Helmand, Farah, Nimroz, Heart, Ghazni, Paktia and Khost), within a period of one month and submit their report to the cabinet meeting.

The first meeting of the cooperating ministries took place on 16/2/1383 at the MIWREs head quarters and decided to send Joined teams to the vulnerable provinces for collecting data synchronously and prepare separate reports about their missions.

The MIWRE together with other relevant ministries and FAO prepared a questionnaire for the group participants and discussed now to collect data in two day seminar, convened in the ministry's HQ. The questionnaires used in the survey has yet to be translated, but will be circulated as soon as they are available in English.

The mixed group was dispatched to the 12 provinces on 23rd of sour and returned between 12 to 16 sour. (13 May – 15 June 2004). The list of the technical personnel visited the provinces is given in the Annex 3.

Assessment procedure

The mission meet with the high level government officials, intellectuals, peoples representative councils, deputies, elders in the provinces, districts, and villages and discussed several topics. The mission also visited storage dams, water prevention structures, rivers, canals, springs, karizes, surface wells, deep wells, arable lands, gardens, and vine yards, cattle's, edible and construction material

markets, living and dwelling conditions, refugees repatriation, recent immigrations, security condition and health conditions etc.

The locations for the assessments were selected through negotiations with the elders and regional responsible. The list of the assessed provinces and the districts assessed by the teams is given in Annex 2.

Analysis and assessment of the results

Analysis and assessment of data from 12 provinces revealed that, the drought is over whelming and affects not only the environment, but livelihoods of the rural and farming people too. The phenomenon of desertification movement of sand dunes, dusty winds, gradual sinking of the ground water level, in some places the absence of surface water for irrigation and drinking, all work together to worsen the living conditions in villages and rural areas which need immediate attention. This is a challenge which slows down the rate of governments struggle towards reconstruction which already had not been so fast. It may direct the international aid towards emergency humanitarian assistances once again. Although the specific proposals about the provincial problems and the potential solutions for them are given in Annex 2, never the less, the contents of the multi-sector analysis and its outcome are given below.

Potable and under ground water

In some provinces the springs and karizes are 90% dry. In shallow wells, the water level has dramatically dropped down. During the six years of drought, the ground water level dropped between 8 to 10 m (2m in the last two years). It should be mentioned that the wells water in Nimruz province were bitter or sour. Deep wells in this province have been dug unprofessionally and without consulting experts. This results in even more drop in water table level.

Some shallow wells of 20-30m depth, dug by MRRD or other organizations are not functioning any more. This is because either the water level has dropped bellow the pump or the pumps had not been repaired. There are active water supply networks in the urban areas of some provinces. They provide water for Government organizations and almost 50% of the people. But these networks have their own problems i.e. lack of generators or other shortcomings. In some cities due to expansion of the city the existing network needs to be expanded. It should be mentioned that in Ghor and Paktia provinces there are no water supply networks.

Irrigation

Although, the Sarda and Zanakhan dams in Ghazni are under repair, but the Sultan dam also needs to be repaired. The main door gates of Dehla dam of Kandahar province have been reconstructed, but due to increasing of mud sediment in the bowl of the dam the reservoir capacity of the dam has decreased, water level of the rivers due to the drought has been reduced, and even some of the small rivers have completely dried up. Intakes and canals have become filled with sediment as a result of floods, reducing their ability to provide water for agriculture lands. Operational and semi operational karizes, especially in villages of Urozgan, Helmand / Zamin Dawar and Ghazni need to be improved by further cleaning.

Agriculture and Animal Husbandry

According to the shortage of irrigation water, around 25 percent agriculture lands under cultivation were exploited. Uncultivated lands changed to arid lands. Currently, an average of around 10% cultivation lands are irrigated by canal and 5% irrigated by wheel buckets and kariz. The main production from these cultivated lands are wheat, barely, maze, beans tea, tobacco, grass and pea. In some provinces, like Helmand, Kandahar, Zabul and Urozgan, most of the land lords were engaged in poppy cultivation on their lands. Because of the low levels of production of agriculture crops in the area, even the expenditure on seeds and chemical fertilize can not be compensated for by the expected harvests. Forests and pastures have been decreased in area by around 80% in some places, especially in Helmand, Nimroz and Farah provinces, communal grazing lands have been eliminated and sand dune movement by serve winds storms have taken these from one location to another.

It is notable that sands have been filled in irrigation canals, agriculture lands, public traffic, passage and some of houses and as a result most of these areas have moved from some form of agricultural production to desert. This has caused people to migrate from their original places. Livestock numbers have decreased significantly in most of the provinces. Transitional diseases have been seen in less amount in animal but in plants most of the diseases like aphides, scale, smut and rust, locust attack and land noxious germs, mostly existed, which the rural people were unable to treat. The number of active animal and plant disease clinics are very few in districts and villages. There is a lack of medicines and physicians in the existing clinics.

Social-economics

The food stuffs and construction materials have been seen in large amount in markets in the centre part of the provinces, but in the remoter district and village markets, these are less evident, and often at the village level not available at all. Many of these commodities are imported from abroad and there is little evidence of products from domestic production. In most parts of these provinces the public properties such as land and houses has been forcibly taken over by powerful elites. These powerful local elites have taken over these properties without paying any tax to the government and illegitimately used resources and illegal methods to acquire them.

The employment situation for most of the people was not encouraging, with serious difficulties in the rural areas of joblessness that have exacerbated poverty levels. But for those with employment opportunities, the prevailing daily wage rates were found to be 500 Afg for skilled and 170 Afg for unskilled labour.

The current assessment has shown that within the last 1½ year many refugees were returned back to their places of origin to rebuild their livelihoods. They often rehabilitated their houses, but most of the water resource and agriculture networks were damaged while these families were absent from Afghanistan. It is notable that these returnees are in extreme need of financial assistance and an implementation strategy to respond to their requirement is urgently required.

But in contrast, inhabitants of some rural areas, particularly in Ghor, Nimroz, Paktia, Ghazni and upper part of Helmand province have abandoned their houses and moved to provincial centres because of lack of both water and employment opportunities. Some families have migrated even further to Iran and Pakistan.

Since pasture lands have degraded, this has resulted in a decrease in available forage for the livestock of kuchi (pastoral nomads) and their animal numbers have decreased as a result significantly in the comparison of pervious years.

Human diseases such as *typhus, diarrhoea, tuberculosis* and *rheumatism* have been prevalent, exacerbated by the lack of access to medical services including clinics, medicines, obstetric and gynaecology physicians. Lack of access to safe water has also been a significant contribution to the increasing the incidence of these diseases.

Roads between central provinces and districts and between district and villages are in bad condition, often requiring capital intensive repairs. In some cases the condition of these roads has deteriorated so much that communications and relations between provincial and district centres has all but ceased. Also all sector administrative staff at a district level are facing shortages of proficient personnel.

The security situation was assessed a satisfactory, but a satisfactory security environment still does not exist in every one of the provinces visited. The survey could not be carried out without appropriate security provision and clearances, and was one form of testing the security environment in the districts visited. The security in Heart province was generally good, but there were security concerns in districts of other provinces that prevented assessments from being carried out there.

Mission recommendations

Considering the major problems encountered during the assessment, the mission has summarised their recommendations for solutions below:

1. Designing of emergency plans by the deputy ministers from the sector ministries, including the Ministry of Finance and Planning. These plans need to be proportionate with the emergency requirements to protect the livelihoods of the vulnerable in these areas.
2. Elaboration of policies on plans for the prevention of increased deterioration in the lives and livelihoods in these provinces in the short to medium term.
3. Design of emergency development planning that would be include the following:
    - Provision of potable water to be accessible.
    - To curtail the unprofessional usage of underground water resources.
    - Rehabilitated water supply network in centre of the provinces.
    - Protection of plants and both the remaining fruit and non-fruit bearing trees.
    - Programmes to address high levels of unemployment.
    - Poppy eradication programmes.
    - Support improved access to health care through improved clinics, availability of physicians and expertise in obstetrics and gynaecology to address the high-level of maternal and child mortality.
    - Rehabilitation of emergency irrigation projects on canals and reconstruction of reservoir dams and intakes on rivers, building of reservoir dams by utilizing of seasonal rains in valleys and rainfall harvesting from the hills where possible (these issues are specified in each provincial report).
    - Cleaning of kariz, springs, stream and canals that addresses in an effective manner the emergency needs for water.
    - Reconstruction of roads.

- Maintaining of security and disarmament of local illegal militia.
- Persuading encourage local communities to take care and protect local public property.
- To take action to reduce unnecessary and irresponsible surveys at a household level conducted by NGOs and other agencies. Such unnecessary surveys increase respondents expectations of programmes and assistance, and if this is not forthcoming results in resistance and disaffection and a lack of willingness to participate in further surveys and programmes taken on by government.
- To ensure the restitution of illegally acquired public property from local elites to the appropriate public domain.

Annex 1: Recommendations and specific solutions of each of the 12 provinces surveyed.

Khost Province

The drought not only created a negative impact on agriculture and animal husbandry, but in most villages, created such water scarcity that people were forced to purchase water from far with cash. Water shortages had never been so severe in this province, and this is the first time that people have had to resort to purchasing of water from outside of their communities.

The main proposals for this province are as follows:

- Provision of potable water in the area by well cleaning and to setup hand pump and water supply network in centre of the province and districts.
- Provision of water for agriculture by construction of reservoir dams in main area Doodmanda, Morghaz, Pak, Toorgani, Sargai and additionally to produce hydro-electricity.
- Prohibition of further unplanned and illegal digging of wells. Further digging of wells should be carried out after the consultation of technical and professional experts, to ensure such activities don't further exacerbate falling water tables.
- Treatment of plant and fruit-bearing diseases.
- An effective and accessible implementation of a credit system for land-less farmers and poor people.
- Reconstruction of roads building of school, clinics, in central of the province in districts are recommended.
- Supplementing of Government administration from technical and professional personnel and equipment and tools for functioning of works for administration civil services, particularly for irrigation, communication, information and culture.
- Provision of agriculture tractors via farmer cooperatives, can be managed. If in the Khost province the reservoir dams mentioned above are not built, it is expected most people will have to migrate.

Paktia Province

In this province, on average the underground water resource in within six years of drought has decreased by 16 metres, but in comparison to last year, it is hardly changed. Water canals from surface resources have been dried and people use the water of karizes, springs, and the deep wellS for the purposes of irrigation and drinking.

The main proposals for this province are as follows:

- Provision of potable water in villages and localities far away from the Kharm River.
- Strengthening and improvement the route of Kharm River by the use of gabions.
- Cleaning of kariz and springs and canals.
- Protection and maintaining of state forests, which contain around 20,000 ha of lands. Other wise these forests will rapidly decline with illegal cutting for sale of local fuel use.
- Survey of reservoir dams in part of Karam River, in Ahmad Khel Jasi area is suggested.
- Provision of agriculture medicines.
- Construction of schools, improvement of communication roads, clinics in centre and districts level.
- Job opportunity creation.
- Supplementing of technical and professional staff in all sectors of the province and in districts levels.
- Establishment of agriculture cooperatives.
- Disarmament of local elites and militia.

Paktika Province

The underground water of this region is sour and bitter. Because of the reduction of surface water, people are using the canal water for irrigation and drinking. And potable water has to be transferred from between 1 km to 20km distance. In particularly, relating to the Orgoon district.

Security concerns are the main problem of the ordinary people and government civil service staff, which even in Sharan district during the night time the cruise missile hit the city area. As the mission convoy proceeded to Wazikhwa district, vehicles just ahead of this convoy came under enemy attack and resulted in two people being killed and two people injured, highlighting the insecure nature of some of these areas and the difficulty of conducting surveys. The Government staff living in the remoter areas of the province are performing their functions and duties secretly to avoid exposing themselves to unnecessary security risks and attacks.

The main proposals for this province are as follows:

- In Wazikhwa district, forests and fruit-bearing trees are desperately needed to be planted to stabilise the agricultural lands that have turned deserts, producing dust storms in many areas exacerbating the incidence of respiratory diseases.
- Lack of employment opportunities particularly for young people is a particular risk. This often forces these young people to look for job opportunities abroad requiring them to sell whatever assets they have locally to fund this economic distress migration.
- Survey and construction reservoir dams of Paltash, park, Khozi, entrance dam of Zazi Safidan Zazi, Gomal dam, Delwara, Woch Kharwar, Warma Hee, could solve the main problems of the people and it would provide good provision of job opportunities for the local people.
- There has been an influx of young Pakistani labourers in this region. This has caused competition for local employment, and heightened in security in this border area.

Ghazni Province

- Lack of potable water in most areas including central, district and villages comprised the main problem of this region, particularly in districts such are Jaghori, Malistan, Jaghatoo, Waghiz,